Trend in *Listeriosis* in FoodNet Sites: 1996-1998

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Background: Foodbome transmission is recognized as a major cause of infection with *Listeria* monocytogenes. Populations at greatest risk for *Listeriosis* include the elderly, persons with compromised immune systems, and pregnant women and their fetuses. Clinical manifestations of *Listeriosis* are serious and include bacteremia and meningitis in high-risk groups. In recent years, there have been food industry, regulatory, and education efforts to prevent *Listeriosis*. Although the incidence of culture-confirmed *Listeriosis* declined from 1989 (0.73 per 100,000 persons to 1993 (0.42 per 100,000), more recent trends in incidence have not been reported.

Methods: Since 1996, active laboratory surveillance has been conducted for culture confirmed cases of L. monocytogenes infection in the Emerging Infections Program's Foodbome Diseases Active Surveillance Network (FoodNet) sites in California, Connecticut, Georgia, Minnesota, and Oregon. To ascertain cases, clinical laboratories are contacted at least monthly.

Results: There were 66, 77, and 83 culture-confirmed cases of L. monocytogenes in the FoodNet sites during 1996,1997, and 1998, respectively, for an annual incidence of 0.46, 0.53, and 0.57 cases per 100,000 persons each respective year .Among the 226 cases identified, the average annual incidence was highest among persons <1 year of age (3.9 per 100,000) and persons > 60 years of age (1.7 per 100,000). During this period, 93.4% of patients with culture-confirmed L. monocytogenes infections were hospitalized and 15.5% died.

Conclusion: In contrast to the 1989-1993 time period, from 1996-1998, the incidence of *Listeriosis* showed no further decline. Persons <1 year of age had the highest rate, reflecting the high rise of perinatal illness. Individuals over 60 years of age also had elevated incidence rates, reflecting the higher prevalence of immunocompromising conditions in the elderly. A high proportion of persons infected with culture-confirmed L. monocytogenes were hospitalized, many of whom died. Further efforts to reduce L. monocytogenes contamination of high-risk foods, such as processed meats, may require additional interventions, including post-processing pasteurization or irradiation. To further reduce the burden of disease, educational messages about avoiding high-risk foods should be directed toward the elderly, pregnant women, and immunocompromised persons.

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